

WHAT IS CLAIMED IS:

1. A method of treating a fiber comprising the step of:  
5                   applying one or more aqueous treating compositions to the fiber, wherein the one or more aqueous treating compositions comprise at least one crosslinking agent selected from the group consisting of antimony potassium tartrate (APT), stannous chloride, and a combination thereof.  
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2. The method of Claim 1, wherein the step of applying one or more aqueous treating compositions to the fiber comprises:  
                  applying a first aqueous treating composition comprising tannic acid to form a coated fiber;  
15                   forming a fixed coated fiber by exposing the coated fiber to heat for a sufficient time to fix the tannic acid on and in the fiber; and  
                  forming an overcoated fiber by applying a second aqueous treating composition to the fixed coated fiber, wherein the  
20                   second aqueous treating composition comprises stannous chloride, and, optionally, a fluorochemical component.
3. The method of Claim 2, further comprising:  
                  drying the overcoated fiber using dry heat.  
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4. The method of Claim 2, wherein the first aqueous treating composition further comprises (i) a crosslinking component selected from the group consisting of antimony potassium tartrate, stannous chloride, or combinations thereof; (ii) a stain-resist material  
30                   comprising at least in part an aqueous emulsion of polymerized monomers, wherein the monomers comprise (meth)acrylic acid, alkyl (meth)acrylic acid, and a substituted or unsubstituted styrene; and (iii) optionally, a fluorochemical component.
- 35   5. The method of Claim 4, wherein the first aqueous treating composition further comprises urea sulfate.

- 5 6. The method of Claim 2, wherein the first aqueous treating composition further comprises (i) a stain-resist material comprising at least in part an aqueous emulsion of polymerized monomers, wherein the monomers comprise (meth)acrylic acid, alkyl (meth)acrylic acid, and a substituted or unsubstituted styrene; and (ii) a fluorochemical component.
- 10 7. The method of Claim 6, wherein the first aqueous treating composition further comprises urea sulfate.
- 15 8. The method of Claim 2, wherein the second aqueous treating composition further comprises a fluorochemical component, wherein the fluorochemical component comprises a polymer having a vinyl chloride monomeric component within the polymer.
- 20 9. The method of Claim 2, wherein (i) the first aqueous treating composition further comprises (a) a stain-resist material comprising at least in part an aqueous emulsion of polymerized monomers, wherein the monomers comprise (meth)acrylic acid, alkyl (meth)acrylic acid, and a substituted or unsubstituted styrene; urea sulfate; and (b) optionally, a first fluorochemical component, wherein the first fluorochemical component comprises a first polymer having a vinyl chloride monomeric component within the first polymer; and (ii) the second aqueous treating composition further comprises a second fluorochemical component, wherein the second fluorochemical component comprises a second polymer having a vinyl chloride monomeric component within the second polymer.
- 25 10. The method of Claim 1, wherein the fiber comprises polyamide.
- 30 11. The method of Claim 1, wherein the fiber is a carpet yarn or carpet.
- 35 12. A method of treating a carpet comprising a plurality of fibers, wherein at least a portion of the plurality of fibers is treated using the method of Claim 1.

13. A method of treating a fiber comprising the step of:  
applying an aqueous treating composition to the fiber,  
wherein the aqueous treating composition comprises stannous  
chloride.
14. The method of Claim 13, wherein the aqueous treating  
composition further comprises a fluorochemical component.
15. The method of Claim 13, wherein the aqueous treating  
composition consists essentially of water, stannous chloride, and a  
fluorochemical component.
16. The method of Claim 15, wherein the fluorochemical  
component comprises a polymer having a vinyl chloride monomeric  
component within the polymer.
17. The method of Claim 13, wherein the step of applying the  
aqueous treating composition to the fiber comprises:  
contacting the fiber with a spray coating or foam coating  
comprising at least stannous chloride and, optionally, a fluorochemical  
component.
18. The method of Claim 13, further comprising:  
drying the fiber using dry heat.
19. The method of Claim 13, wherein the fiber comprises  
polyamide.
20. The method of Claim 13, wherein the fiber comprises a fiber  
previously treated with a tannic acid-containing composition.
21. The method of Claim 13, wherein the fiber is a carpet yarn or  
carpet.
22. A method of treating a carpet comprising a plurality of fibers,  
wherein at least a portion of the plurality of fibers is treated using the  
method of Claim 13.

23. A method of treating a fiber comprising the step of:  
applying a first aqueous treating composition to the fiber,  
wherein the first aqueous treating composition comprises tannic acid;  
5 at least one stain-resist material; and optionally, a fluorochemical  
component.
24. The method of Claim 23, wherein the first aqueous treating  
composition further comprises a crosslinking agent selected from the  
10 group consisting of antimony potassium tartrate, stannous chloride,  
and a combination thereof.
25. The method of Claim 23, wherein the first aqueous treating  
composition consists essentially of water, tannic acid, antimony  
15 potassium tartrate, at least one stain-resist material, urea sulfate, and  
optionally, a fluorochemical component.
26. The method of Claim 25, wherein the first aqueous treating  
composition does contain a fluorochemical component comprising a  
20 polymer having a vinyl chloride monomeric component within the first  
polymer; and wherein the stain-resist material comprises an aqueous  
emulsion of polymerized monomers, wherein the monomers comprise  
(meth)acrylic acid, alkyl (meth)acrylic acid, and a substituted or  
unsubstituted styrene.  
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27. The method of Claim 23, further comprising:  
applying a second aqueous treating composition to the  
fiber, wherein the second aqueous treating composition comprises at  
30 least stannous chloride .
28. The method of Claim 23, wherein the fiber comprises  
polyamide.
29. The method of Claim 23, wherein the fiber is a carpet yarn or  
35 carpet.

30. A method of treating a carpet comprising a plurality of fibers, wherein at least a portion of the plurality of fibers is treated using the method of Claim 23.
- 5 31. A treated fiber comprising a fiber having coated thereon at least one crosslinking agent selected from the group consisting of antimony potassium tartrate (APT), stannous chloride, and a combination thereof.
- 10 32. The treated fiber of Claim 31, wherein the fiber has coated thereon stannous chloride.
- 15 33. The treated fiber of Claim 31, wherein the fiber has coated thereon tannic acid, at least one stain-resist material, and optionally, a fluorochemical component.
34. The treated fiber of Claim 33, wherein the fiber has coated thereon urea sulfate.
- 20 35. The treated fiber of Claim 34, wherein the fiber has coated thereon a fluorochemical component.
- 25 36. The treated fiber of Claim 35, wherein the fiber has coated thereon APT.
37. The treated fiber of Claim 35, wherein the fiber has coated thereon stannous chloride.
- 30 38. The treated fiber of Claim 36, wherein the fiber has coated thereon stannous chloride.
39. A carpet comprising the treated fiber of Claim 31.
- 35 40. A method of cleaning a carpet comprising the steps of:  
(a) providing a carpet, wherein the carpet comprises a plurality of fibers having coated thereon at least one crosslinking agent selected from the group consisting of antimony potassium tartrate

(APT), stannous chloride, and a combination thereof; and

(b) applying a cleaning solution to the carpet, wherein the cleaning solution has a pH of greater than about 8.0.

5           41. The method of Claim 40, wherein the cleaning solution has a pH of greater than about 10.0.

          42. The method of Claim 40, wherein the cleaning solution comprises an ammonia-containing solution.

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          44. The method of Claim 40, wherein the plurality of fibers has coated thereon a tannic acid.

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